

NIOSH recommends that health care facilities use safer medical devices to protect workers from needlestick and other sharps injuries. Since the passage of the Needlestick Safety and Prevention Act in 2000 and the subsequent revision of the OSHA Bloodborne Pathogen Standard, all health care facilities are required to use safer medical devices.



SAFER MEDICAL DEVICE IMPLEMENTATION IN HEALTH CARE FACILITIES

SHARING LESSONS LEARNED

NIOSH has asked a small number of health care facilities to share their experiences on how they implemented safer medical devices in their settings. These facilities have agreed to describe how each step was accomplished, and also to discuss the barriers they encountered and how they were resolved, and most importantly, lessons learned.



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Phase 1: Form a Sharps Injury Prevention Team

Description of Facility

Our hospital is licensed for approximately 300 beds and serves a diverse patient population ranging from neonates to geriatric patients. There are three critical care units including a level III+ neonatal intensive care unit (NICU). The hospital has one of the highest volumes of surgical cases in the region. Surgical services are provided through an in-patient general surgical center and two ambulatory surgical centers. A sub-acute unit, a medical-psychiatric unit, and a dialysis unit are on site. Specialty services include Neonatology, Ophthalmology, an Endoscopy Center, and a comprehensive Oncology Service. The community recognizes the OB Service as a center of excellence. Outpatient diagnostic and treatment facilities include a Cardiac Catheter Laboratory, Radiation Oncology, a Diabetes and Nutrition Center, and a Wound Care Center. A community health center offers 7 day a week urgent care services to inner-city residents, in addition to providing care in a number of specialties including pediatrics, and HIV care.

The process we used to identify sharps injury prevention team members:

The team was initiated based on recommendations by the Infection Control Coordinator and the facility's Infection Control Committee. The rationale for developing a multidisciplinary work group was shared with management. Pertinent sections of the NIOSH publication "*Preventing Needlestick Injuries in Health Care Settings*" were shared with those individuals who were selecting the membership.

From the outset, it was recognized that an administrative sponsor was needed to demonstrate management's commitment and solicit support for the activities of the Sharps Injury Prevention Team. It was hoped the administrative sponsor would ensure accountability in terms of attendance and the members' team activities. Members were chosen based on discussions between the team's administrative sponsor (V.P. for Quality and Performance Improvement), members of the Infection Control Committee, and the Infection Control Coordinator.

With support from the administrative sponsor, members were contacted about the team's activities and subsequently invited to the kick-off meeting. The Infection Control Coordinator discussed the mission of the team with each member, as well as how they would be expected participate.

Although many of the members of the team were identified and appointed before the first meeting, discussions with the team during that 1st meeting provided a basis for identifying and recruiting additional key participants. For example, in order to identify and recruit staff level nurses, the infection control coordinator was asked to share information about the new team with the Professional Nurse Council (PNC Committee). This council is composed exclusively of non-management staff level nurses who meet monthly to discuss a variety of issues. Once the team's objectives were discussed with this group, two staff nurses stepped forward to volunteer.

The sharps injury prevention team was composed of the following members:

Infection Control Coordinator:	Management
Purchasing:	Management
Risk Management:	Administration
V.P., Quality and Performance Improvement:	Administration
Employee Health Nurse	Management
Nurse Manager, Surgical Intensive Care	Management and direct patient care
Phlebotomy supervisor	Management and direct patient care
Clinical Specialist, Medical Surgical Units	Direct patient care
Staff Registered Nurse, Nursery	Direct patient care
Staff Registered Nurse, Operating Room	Direct patient care

The designated coordinator and facilitator was the Infection Control Coordinator. The IC Coordinator has 8 years of infection control experience, which included product trials of needlestick prevention devices. He has a BS in Laboratory Medicine and an MS in microbiology.

Recommendations regarding the composition of the sharps injury prevention team

Our team initially had ten members, which worked well. There was enough time for everyone to directly participate. The membership was diverse enough to represent all the stakeholders needed to make good decisions. There were times that additional input is solicited outside the regular membership. For instance, nursing members of the team noted that medications contained in glass ampules were not being delivered with needles that were safety engineered. Medication dispensed from glass ampules are injected through a “filtered” needle to prevent any tiny particles of glass from entering the bloodstream. However, because no safety engineered filter needles were commercially available, we invited a pharmacist to attend our meeting on an ad hoc basis in order to explore the alternative, such as unit dosed syringes, pre-loaded with medication. So, even though we had a small core group, we invited other people to attend in order to serve as a resource.

Lessons learned

There was difficulty scheduling meeting times that fit everyone’s busy schedule. The biggest obstacle was getting clinical staff that were direct care providers away from their routine duties. Through administrative support, schedules were adjusted to provide adequate coverage for these members when they were attending meetings. Another obstacle was emergencies that developed rather suddenly, which prevented certain members from attending. Because meetings were scheduled only once a month, this presented problems with the team’s ability to make decisions and assure continuity of follow-up.

Supervisors were generally supportive of staff attending meetings. I believe this was due to their perception that the team was addressing critical issues of occupational safety.

Even though there was a process for selecting and implementing needlestick prevention devices in the past at our hospital, I believed that a dedicated, focused team whose mission was to reduce sharps injuries would be more productive. The process used in the past was shared across numerous committees, including the Infection Control Committee, Safety Committee, and the Value Analysis/Products Committee. Because there were competing priorities on the agendas for each one of these groups, the rate of progress in implementing

new safer medical devices was very slow. I thought the decision cycle time from identification of issues to device implementation could be accelerated with a dedicated team.

What we would do differently

I would ask the purchasing department to provide a list of all areas using non-safety engineered devices and then interview management from those areas to determine what front-line staff could be available to participate on the team. I would not ask management to select members for the team, unless I did not have an administrative liaison. Membership is best selected by a person or group of people who have a global understanding of the issues surrounding occupational BBP exposure and prevention and who know the key individuals who can act as agents of change in the facility.

Advice for other facilities

Management support is essential. The support is needed to demonstrate the leadership's commitment to providing a safer work environment. It also helps to ensure that members of the committee take assignments seriously and follow-up appropriately within their respective areas to disseminate news about the team's activities.

At the very first meeting, an overview of the OSAH BBP rule was provided. In addition, provisions of the Needlestick Prevention Act were discussed in detail. This gave the members insight into the regulatory climate and the impetus it provided us to start a new initiative.

Other information about the process used or problems encountered in forming a sharps injury prevention team.

I think that initially, it would have been better to meet more frequently than once a month. If we had met at 2 week intervals, more momentum could have developed earlier in the process and decisions could have been acted on sooner.

Staff Hours:

Type of Staff	Hours Spent on Phase 1
Management	8 hours
Administrative	10 hours
Front-line	3 hours
Total	21

Other, non-labor items: Copying costs

Sharps Injury Prevention Team

10/01/02

Item	Discussion	Action	Responsible Person(s)
Goals of Team	<p>An overview of the goals/objectives of the team was provided. Goals include:</p> <ul style="list-style-type: none"> ▪ Participatation in the NIOSH (CDC) Project on Safer Medical Devices. The project is for 1 year. ▪ Provide a focus group to examine patterns of injury, determine prevention strategies and intervention, and reduce risk related to BBP exposures that are device related. ▪ Identify other factors which increase risk but may not be device-related. (ie: training issues) 	<p>Complete 5 phases of project as required by NIOSH.</p> <ul style="list-style-type: none"> ▪ Form a sharps injury prevention team ▪ Identify priorities ▪ Identify and screen safer medical devices ▪ Evaluate devices ▪ Implement and monitor 	<p>Team members at first meeting included representatives from risk management, purchasing, employee health, nursing, and infection control.</p> <p>The team leader will submit progress reports to NIOSH at the end of each phase of project.</p>
Frequency of Meetings	Team will meet once a month for an hour. Additional meetings may occur during the 1 st year, because of the NIOSH project deadline.	Schedule additional meetings	Team leader and members
Regulatory environment	The impact of the Needlestick Prevention Act and the revised BBP Standard Pathogen Standard (2001) was discussed.	In departments or areas where needlestick prevention devices (NPD) are not used, opportunities to implement NPD should not be missed.	Team members
Recruit additional team members	<p>It was recommended to include "X" on the team, as she has been proactive in getting needlestick prevention devices for her staff. (phlebotomy).</p> <p>The team requires at least 1 staff level nurse.</p>	<p>Speak with "X" about becoming team member.</p> <p>Recruit staff level nurse.</p>	Team leader

	Other staff will be invited as needed	Recruit other staff as needed	Team members
Preliminary assessment of needs	<p>Team needs comprehensive data to assess priorities.</p> <p>Team needs a complete inventory/listing of current sharps usage to identify what areas are using conventional devices where safer medical devices could be used instead.</p> <p>The Dept. of Anesthesia may not be using safety engineered IV needles. Respiratory may not be using using safety engineered blood gas needles.</p> <p>Determine if safety lancets are available in appropriate areas.</p>	<p>Provide detailed information and statistics on sharps related injuries for the previous 6 months. (ie: type of device, safety design or not, procedure, anatomic site of injury, occupation, department).</p> <p>Incidents should be categorized by device type/procedure to gauge magnitude of problem for next meeting.</p> <p>Provide list to team at next meeting.</p> <p>Contact departments in question and determine current status for next meeting.</p> <p>Check available inventory for next meeting.</p>	<p>Employee Health Manager</p> <p>Director of Purchasing</p> <p>Team Leader</p> <p>Director of Purchasing</p>
Resource material for review	<p>Three handouts were provided:</p> <ul style="list-style-type: none"> • NIOSH Alert: Preventing Needlesticks in Health Care Facilities • Checklist for Sharps Injury Protection 	<p>Team members review handouts prior to next meeting.</p>	<p>Team members</p>

	<ul style="list-style-type: none"> Programs for Selecting & Evaluating Safer Medical Devices <p>The NIOSH Project on Safer Medical Devices is on the web at: http://www.cdc.gov/niosh/topics/bbp/safer/</p>	Team members should visit the web site.	Team members
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